Biennial report of the Department of Highways.
Nevada. Department of Highways.
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SPECIAL SUPPLEMENT

TO THE

17TH BIENNIAL REPORT

OF THE

NEVADA STATE HIGHWAY DEPARTMENT

OUTLINING

OPERATIONS AND NEEDS

REVENUES AND EXPENDITURES

NDOT
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Supplement

The following brief statements are considered pertinent to the study and review of the highway department's operations and the material presented in this report:

Highway maintenance expense per mile is continuously rising due to increased costs of materials, equipment, wages, etc.

The total mileage maintained by the department is increasing by about 125 miles annually, (generally the mileage added each year consists of those county roads of most expensive maintenance.)

Federal-aid for the fiscal years ending June 30, 1952 and June 30, 1953 is approximately 11 per cent above the previous biennium, and, consequently, will require more state matching money.

Right of way costs are increasing at a rapid rate due to higher values generally, and also to the fact that considerable work must now be programed in urban areas.

Facilities, such as maintenance residences, garages, shops, storage sheds, etc., are in need of replacement.

$350,000 was authorized for deduction from the State Highway Fund to help finance the new State Office Building.

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To keep up with rising costs and to accomplish these mentioned needs will require at least 1/2 million dollars annually over the presently anticipated income.

These needs are considered minimum; other desirable features such as radio for snow removal equipment in order that travel information can be made available continuously during severe storms, are not being requested at this time.

The following narrative, charts, graphs, and tables have been prepared to show the Department's financial status, together with a breakdown of revenue and expenditures during its history.

RIGHT OF WAY

As in other operating phases of highway construction, right of way cost has steadily increased since 1917.

This rise in cost has been due to: 1 - Development and expansion of the highway system, and 2 - General increase in land and real estate values in Nevada. In the early days of highway construction -- especially that 13 year period 1917 to 1930 -- all highways constituted the original construction and replaced old existing through-county roads. Limited funds and primitive earth moving equipment resulted in a narrow two-lane gravel-surfaced road, many curves, irregular grade and low construction costs. Since the new roadway was narrow, the required right of way was also narrow, and since road building was then a popular idea, many land owners donated land for the right of way.

Automobiles soon became popular, traffic increased, and there followed a period of off-the-highway construction. This consisted of service stations, motels, cafes, and others. Most of these businesses were placed adjacent to the highway right of way line.

During the 30's the early highways soon proved inadequate and expensive to maintain. Road users demanded oil surfaced roads. Consequently, during that period most primary system construction included an oil surface, some increase in width, better alignment and grade. It was during this period that right of way cost began its upward swing, with little or no land being donated. However, it was also during this period that depression conditions kept real estate values at a minimum and the cost of right of way did not increase at an alarming rate.

By 1940, with the advent of more hard surfaced roads and greater sight distance, trucks, busses and passenger cars also improved. The number of vehicles on the roads and the speed at which they traveled increased. It

became evident that even more advancement was necessary in our future highway design. To accommodate this new idea in construction, additional right of way widths, as well as new rights of way, were necessary. Since in many cases the necessary right of way bordered or crossed lands that had become valuable because of highway frontage, the cost of right of way rose rapidly. After World War II highway traffic again increased and had become an essential part of our national defense, as well as vital to peace time transportation. Further demands were made for improved highways with better alignment, grading, and greater sight distance. Again more land had to be taken into the highway right of way. The use of highways during the previous years had brought new uses to the lands adjacent to the highway, thus placing a still higher value on the lands being sought as right of way. Therefore, it has become apparent that as the highway program progresses the costs of right of way will continue to rise.

Today the attitude of land owners has changed. Whereas in the early days land was being donated in order to attract an improved highway system, now the land owner is asking full and complete payment not only for the land but for a possible loss in future revenue because of reduced land ownership. In combatting this change in attitude it has been necessary for the Right of Way Department to employ men skilled in real estate appraisal and negotiations, title search and the procedure necessary for transfer of titles.

The years 1949 and 1950 saw the all time high in right of way expenditures, with a total of $355,753. Of this amount $171,950 was spent in 1949, and $183,803 in 1950. Much of this amount was spent in the reconstruction of projects in or adjacent to the Reno and Las Vegas areas. In both cases it was necessary to expand right of way width for the construction of four-lane highways or to secure ample width on newly built roads allowing room for future development.

Right of way cost can be broken down into three main categories: cost of land; damage as a result of taking or severance; and, the cost of removing encroachments from the newly acquired right of way.

Many construction or reconstruction projects will be in areas of concentrated populations. It is logical, therefore, to assume that the average right of way expenditure for the next biennium will approximate the amount spent during the past two years, or $175,000 per year.

The average per year costs for the three periods mentioned are:

1917-1930	yearly average	$ 5,995
1931-1941	" "	31,320
1942-1948	" "	31,994
1949 and 1950	"	177,876

REVENUES

The tables showing revenues of the Highway Department reflect the itemized growth from 1917 to 1950 by fiscal years. The breakdown into gross State highway revenues and Federal aid was made so that the proportionate share of total revenues derived from the State and from the Federal government, which was available for highway use, could be ascertained. Federal-aid is obviously revenue from a Federal and not a State source. Federal-aid must be matched by State funds, and thus its segregated importance is twofold. First, Federal funds in great part, determine the amount of highway construction; and second, they determine the amount of State money we must provide for matching. State highway revenues include some funds which are expended by various State agencies collecting the revenue, and thus are not actually available for highway operations.

The relative importance of revenues is measured in the various charts and graphs which show the significance of the separate income sources. Graph I, shows the yearly revenues divided into Federal-aid actually received and gross State revenues. From 1931 to 1940 Federal-aid loomed far above State highway revenues; from 1940 to 1950, the State's revenues rose above Federal-aid.

Graph II compares gross State highway revenues by source. The relative importance of gas and diesel fuel tax is shown. The other main sources of State highway revenues are motor vehicle registration fees and Public Service Commission license fees.

Chart I presents total cumulative revenues, relating State revenues and Federal-aid. Through the fiscal years from 1917 to 1950, approximately 53% of all highway revenue came from Federal-aid; 47% from State sources. In the fiscal year 1950, 51% of all highway revenue came from Federal-aid; 49% from State sources.

Chart III is a further breakdown of the 47% constituting the State revenues shown in Chart I. In Chart III, the importance of the gas and diesel tax is shown by the fact that it is 58% of all cumulative State revenues. Other taxes, fees and licenses amount to 27% of all cumulative State revenues. The remaining 15% consists of State Highway Bonds and various non-continuous fees, and refunds from other governmental agencies. See Table I.

EXPENDITURES

Tables showing expenditures reflect the itemized growth from 1917 to 1950 by fiscal years. The distribution of amounts (see Tables II and III) indicates the nature of total expenditures. Federal-aid is of the utmost importance to the State highway expenditures and is segregated so that no only the aggregate amount can be shown but also the amount which the State must provide as matching funds.

Tax collection costs, refunds, transfers, etc., consist of items such as use-fuel and gas-tax administration, gas tax and common carrier refunds, and miscellaneous accounts. (See Table III).

Expenditures arranged according to importance can be seen in the various graphs and charts dealing with expenditures. For example, Graph III gives a yearly comparison of these expenditures and points up the significance of Federal-aid during the years 1931 to 1940; and State expenditures during the years 1945 to 1949.

Graph IV shows a comparison of the types of expenditures. Outstanding in persistence of growth are the maintenance expenditures which have continuously expanded as our highway system has been extended. This fact must receive the attention and consideration of all persons concerned with State highway finances, since Federal-aid cannot be used for highway maintenance.

An examination of State maintenance costs (see Table V) shows that in the fiscal year 1950 Nevada spent $1,553,052 for maintenance and only $1,107,399 of State matching-funds for construction. If State matching-funds for construction are $1,250,000 in each of the fiscal years 1951 and 1952 (see Table V) and maintenance rises to $1,775,000 in 1951 and to $1,850,000 in 1952, it is even more apparent that maintenance is the most important highway expenditure.

Cumulative relationships of expenditure types are shown in the various expenditure charts. Chart II presents the percentage distribution of total cumulative expenditures, relating State expenditures, Federal-aid, and tax collection

costs, refunds, transfers, etc. Through the fiscal years from 1917 to 1950, approximately 54% of all highway expenditures came from Federal-aid; 42% from State expenditures; and 4% represents tax collection costs, refunds, transfers, etc. In the fiscal year 1950, 50% of all highway expenditures came from Federal-aid; 47% from State expenditures; and 3% tax collection costs, refunds, transfers, etc.

Chart IV is a breakdown of the expenditures shown in Chart II, except for the 4% collection costs, etc., which are not usable for highway purposes. The combined construction expenditures of Federal and State funds are 71% of this total; maintenance accounts for an additional 17%; and administration 3%.

Nevada's present maintenance and administration costs are quite comparable to those in Utah and Arizona. Such a comparison shows that Arizona's maintenance cost per mile in 1950 was $630; Utah's $668; and Nevada's $424. Viewed percentagewise, Arizona's maintenance cost was 14% of total highway cost, Utah's 26%, and Nevada's 17%.

A comparison of Nevada's general administration costs with the same two states shows Arizona's highway administrative cost in 1950 was 4% of total highway costs; Utah's 3%, while Nevada's was only 2.5%.

Graph V relates total yearly revenues and expenditures. The most revealing feature of this graph is that expenditures have been exceeding revenues each year since 1946. The State has been using its backlog of unexpended funds built up during World War II when construction activities were curtailed. (There were three years for which no Federal funds were appropriated for highways.) Table VIII shows these funds are now practically exhausted and that the highway fund balance has dropped to a point where it is difficult to meet current contractual obligations. Thus Nevada must either limit its highway maintenance and construction program or seek additional revenue. A curtailed construction program would mean a reduction in Federal-aid.

The present and anticipated dependence of Nevada upon motor transportation for its mines and ranches, its resort and tourist income, its growing trucking industry. suggests that curtailment of the highway construction program would seriously disturb the State's economic system. The State's limitations are revealed by comparing Table IV (Estimates of Revenues) with Table V (Estimates of Expenditures). The comparison suggests that expenditures will exceed revenue during the next three-year period.

Chart V, Growth of State-interest Roads 1917 to 1950, indicates that the State-interest roads have increased from 1,450 miles in 1917 to 6,229 miles in 1950. As originally established. the State-interest roads consisted of 250 miles of Federal-aid routes and 1,200 miles of other State roads. During the years 1917 to 1941 the State-interest roads expanded from 250 miles to 2,064 miles of Federal-aid routes and from 1,200 miles to 3,138 miles of other State roads. In 1941 (the change appearing on the chart in 1942), the Federal-aid Secondary System was established. Since 1941 the State-interest roads have continued to increase, and as of 1950 are 2,204 miles of Federal-aid Primary routes; 2,051 miles of Federal-aid Secondary routes; and 1,974 miles of other State roads.

The red curve-line on Chart V shows the amount and growth of miles maintained by the State. Miles maintained increased from 167 in 1919-1920, to 2,978 in 1941-1942, and to 3,536 in 1949-1950.

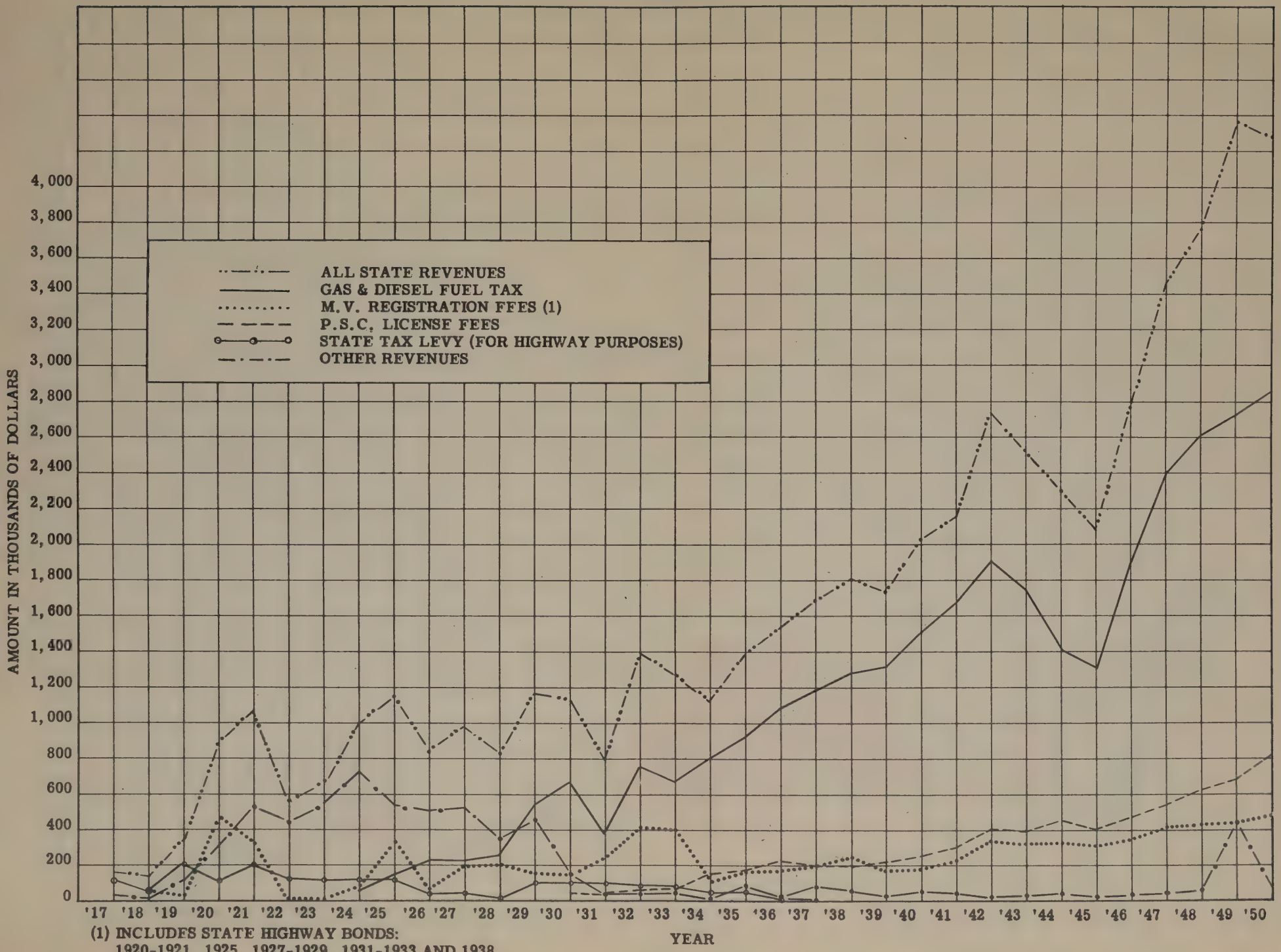
All mileage on the system improved by the State must be maintained by the State Highway Department. Thus, it is evident that total maintenance costs are definitely related to total miles of improved roads, and maintenance costs will continue to increase as the system of improved roads grows. This is true even if labor and material costs remain constant.

OF NEVADA STATE DEPARTMENT OF HIGHWAYS
BY FISCAL YEARS - 1917 TO 1950

GRAPH I

COMPARISON OF YEARLY STATE REVENUES OF NEVADA STATE DEPARTMENT OF HIGHWAYS BY FISCAL YEARS - 1917 TO 1950

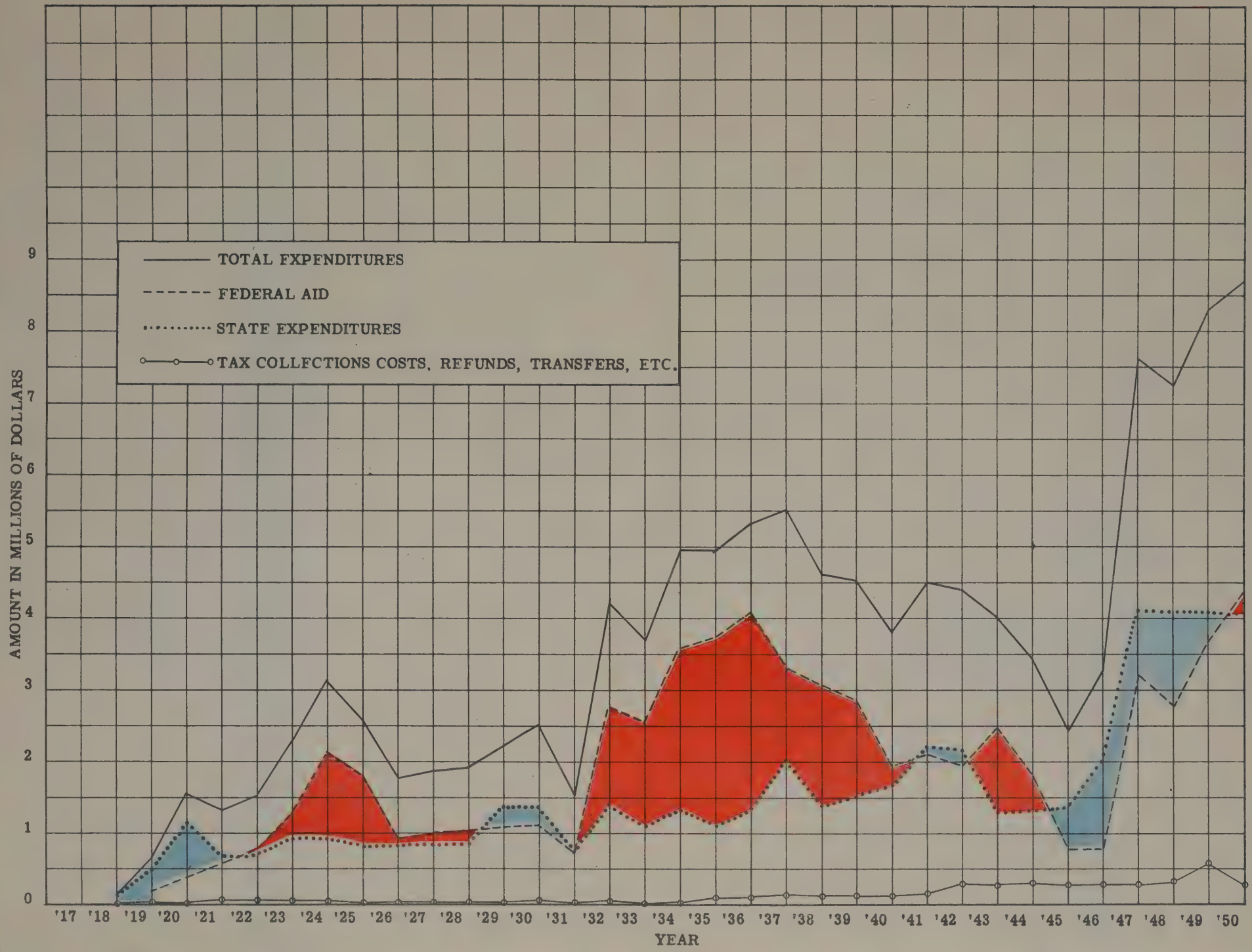
GRAPH II



(1) INCLUDES STATE HIGHWAY BONDS:
1920-1921, 1925, 1927-1929, 1931-1933 AND 1938

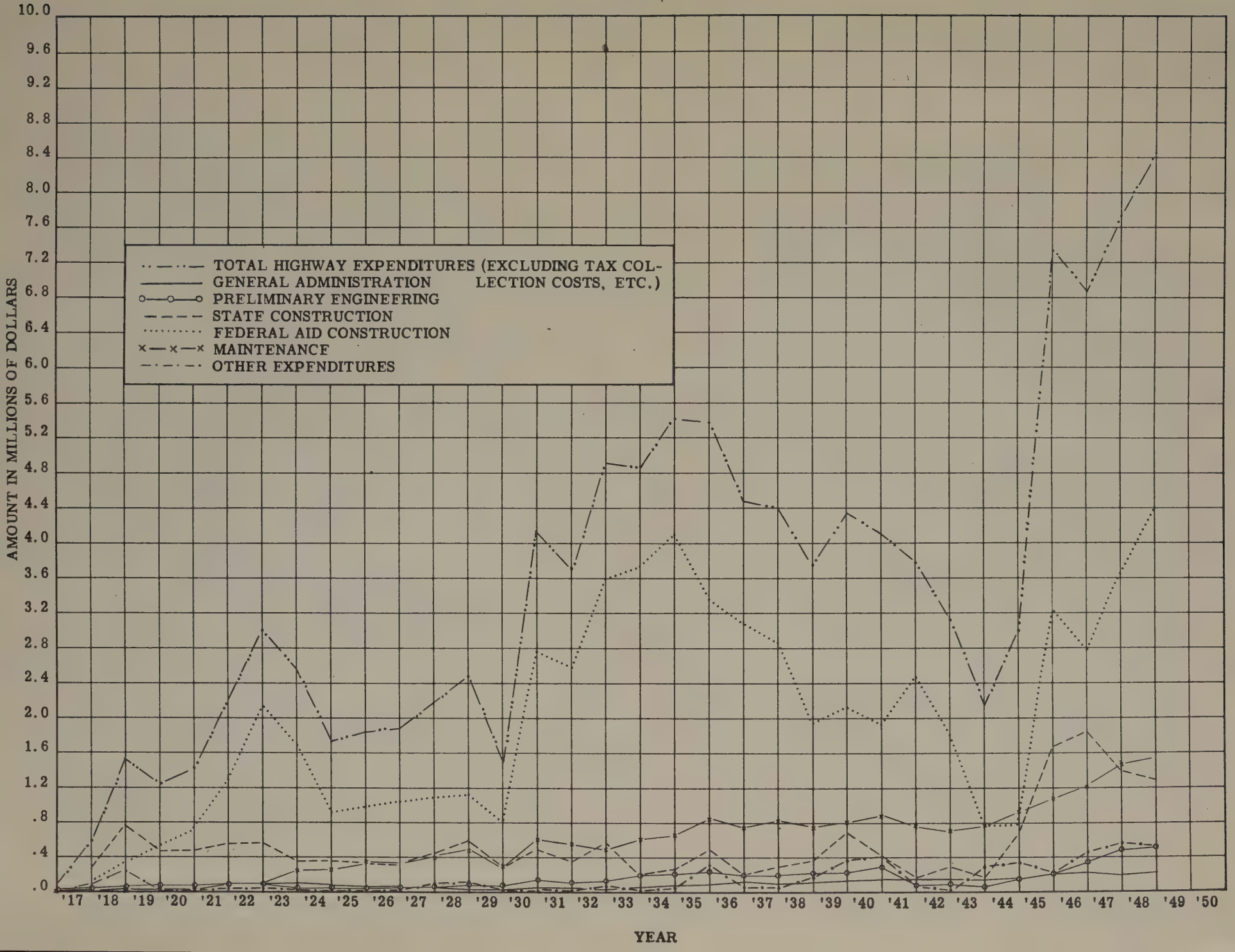
COMPARISON OF YEARLY EXPENDITURES OF NEVADA STATE DEPARTMENT
OF HIGHWAYS BY FISCAL YEARS - 1917 TO 1950

GRAPH III



COMPARISON OF YEARLY STATE EXPENDITURES OF NEVADA STATE DEPARTMENT OF HIGHWAYS BY FISCAL YEARS - 1917 TO 1950

GRAPH IV



COMPARISON OF YEARLY REVENUES AND EXPENDITURES OF NEVADA STATE DEPARTMENT OF HIGHWAYS BY FISCAL YEARS - 1917 TO 1950

GRAPH V

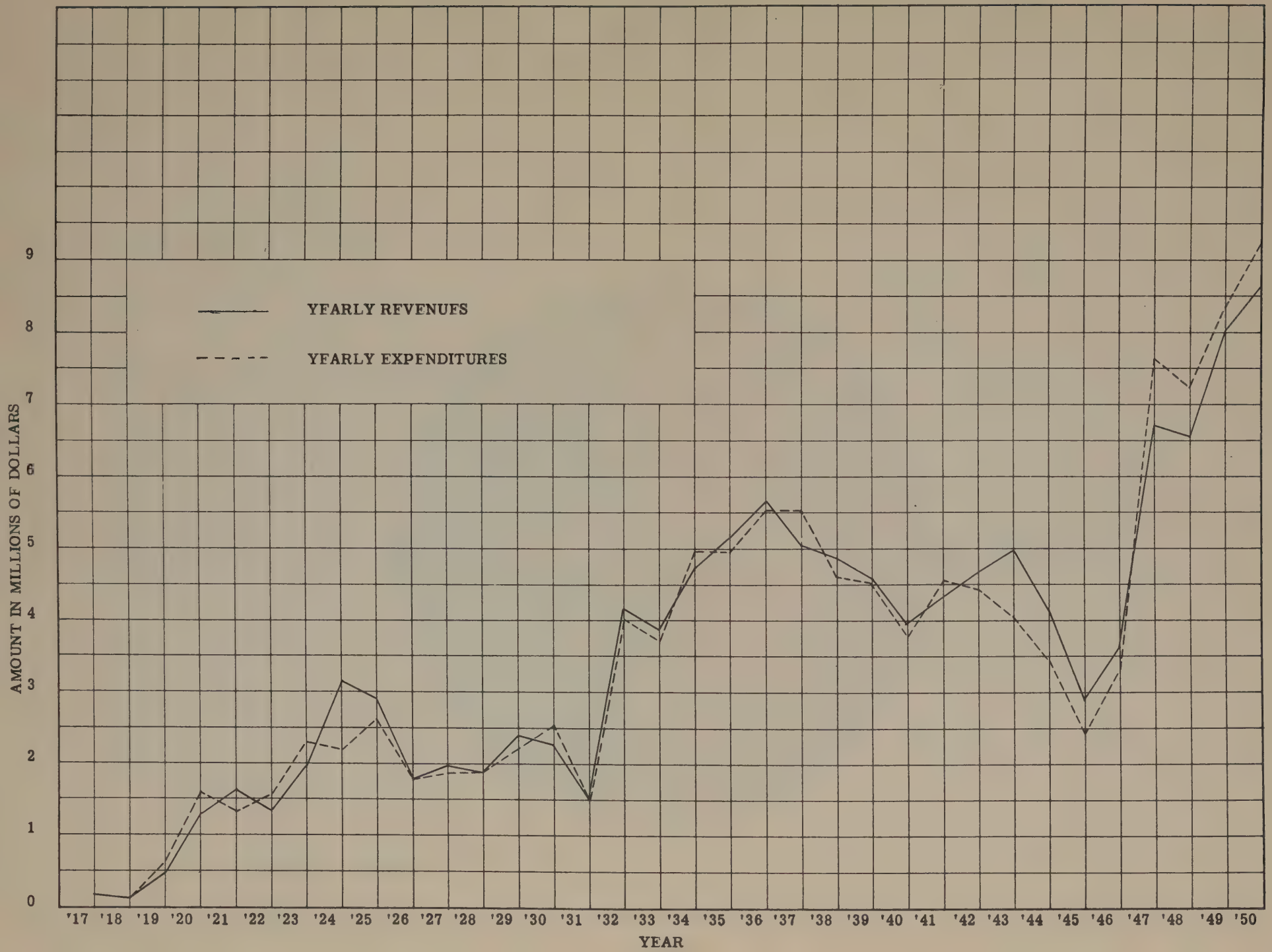
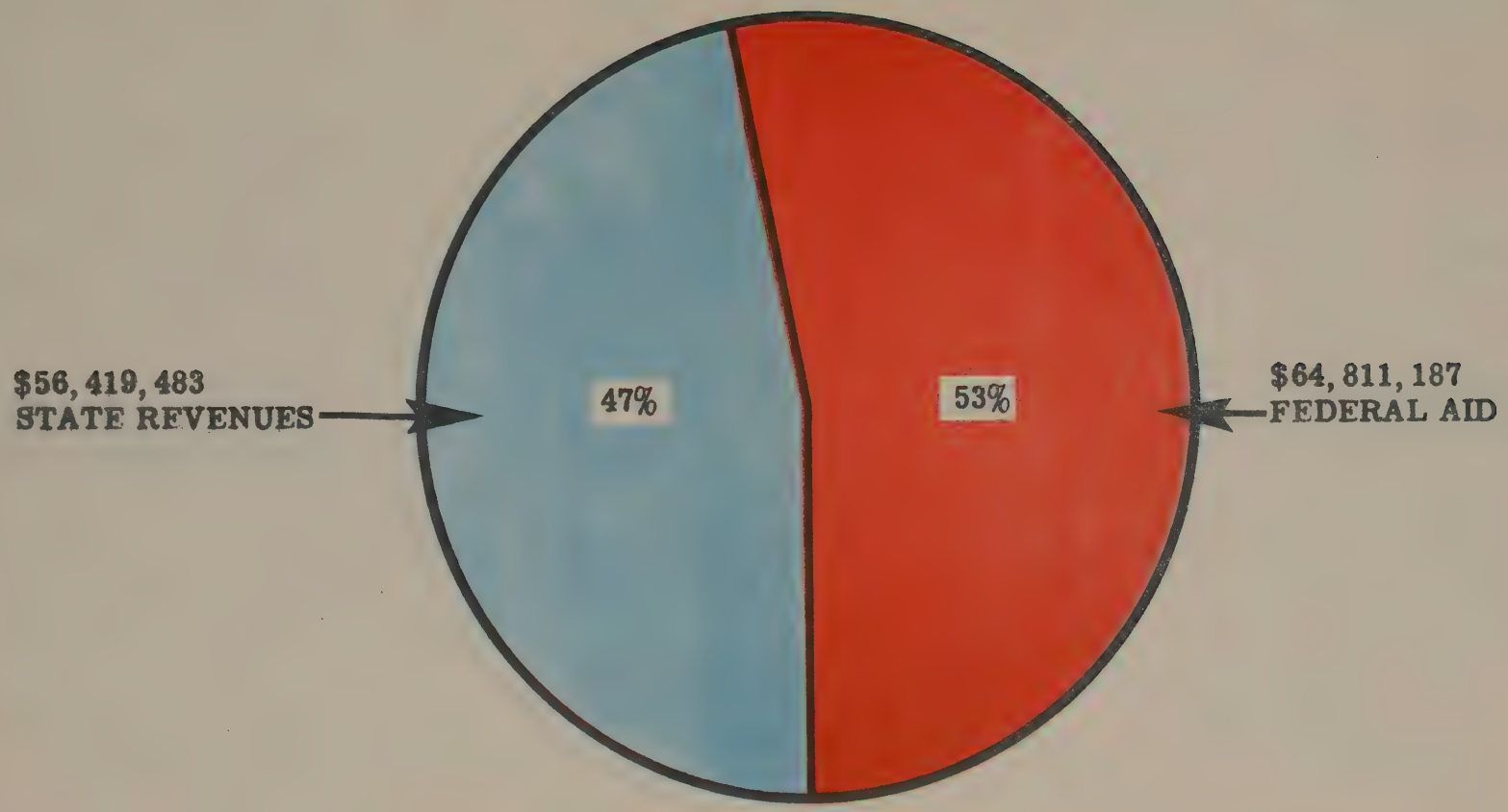


CHART 1 - PERCENTAGE DISTRIBUTION OF TOTAL CUMULATIVE REVENUES OF STATE OF NEVADA DEPARTMENT OF HIGHWAYS - 1917 TO 1950 (1)

TOTAL = $121,230,670



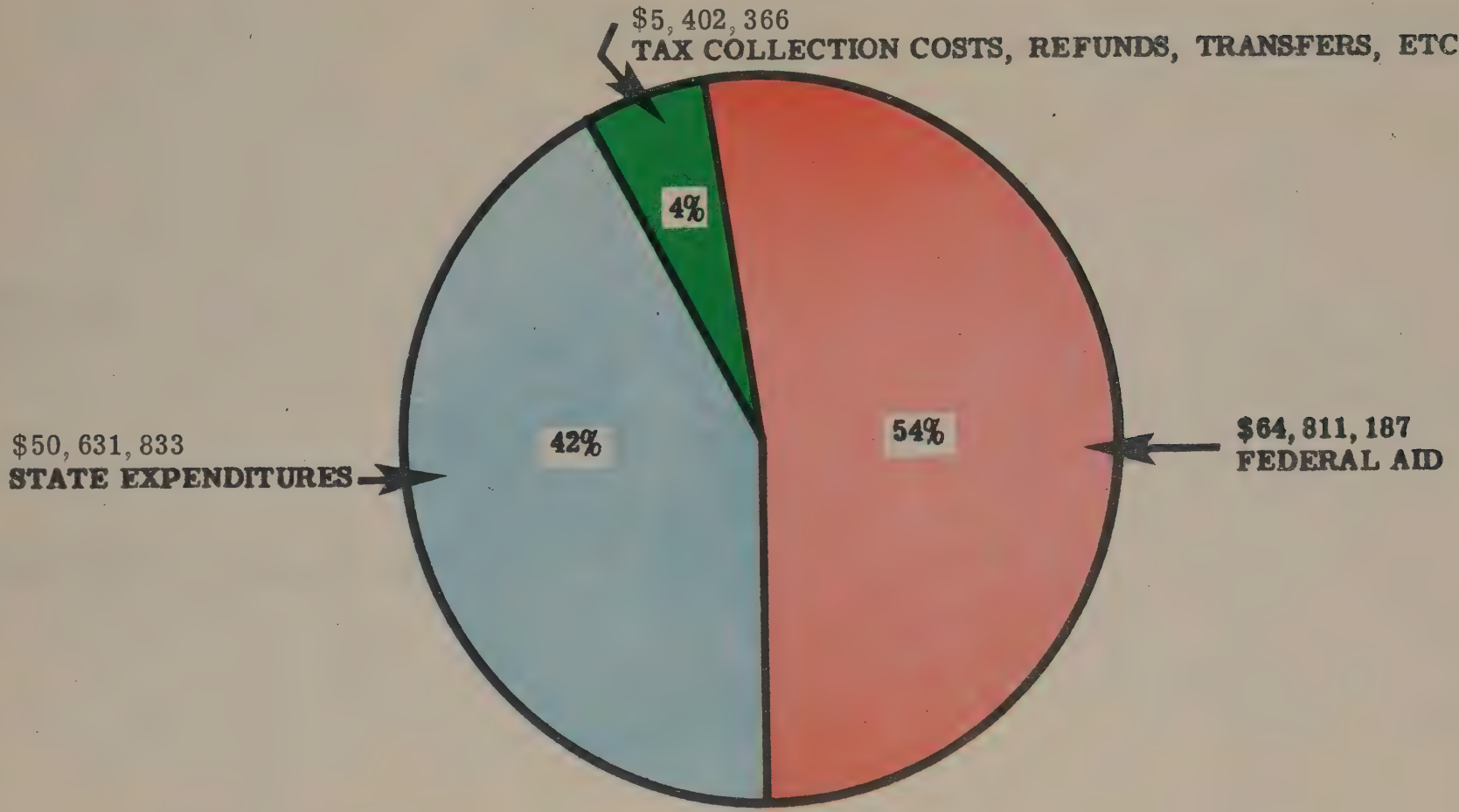
(1) FISCAL YEARS

CHART 2 - PERCENTAGE DISTRIBUTION OF TOTAL CUMULATIVE

EXPENDITURES

OF STATE OF NEVADA DEPARTMENT OF HIGHWAYS - 1917 to 1950 (1)

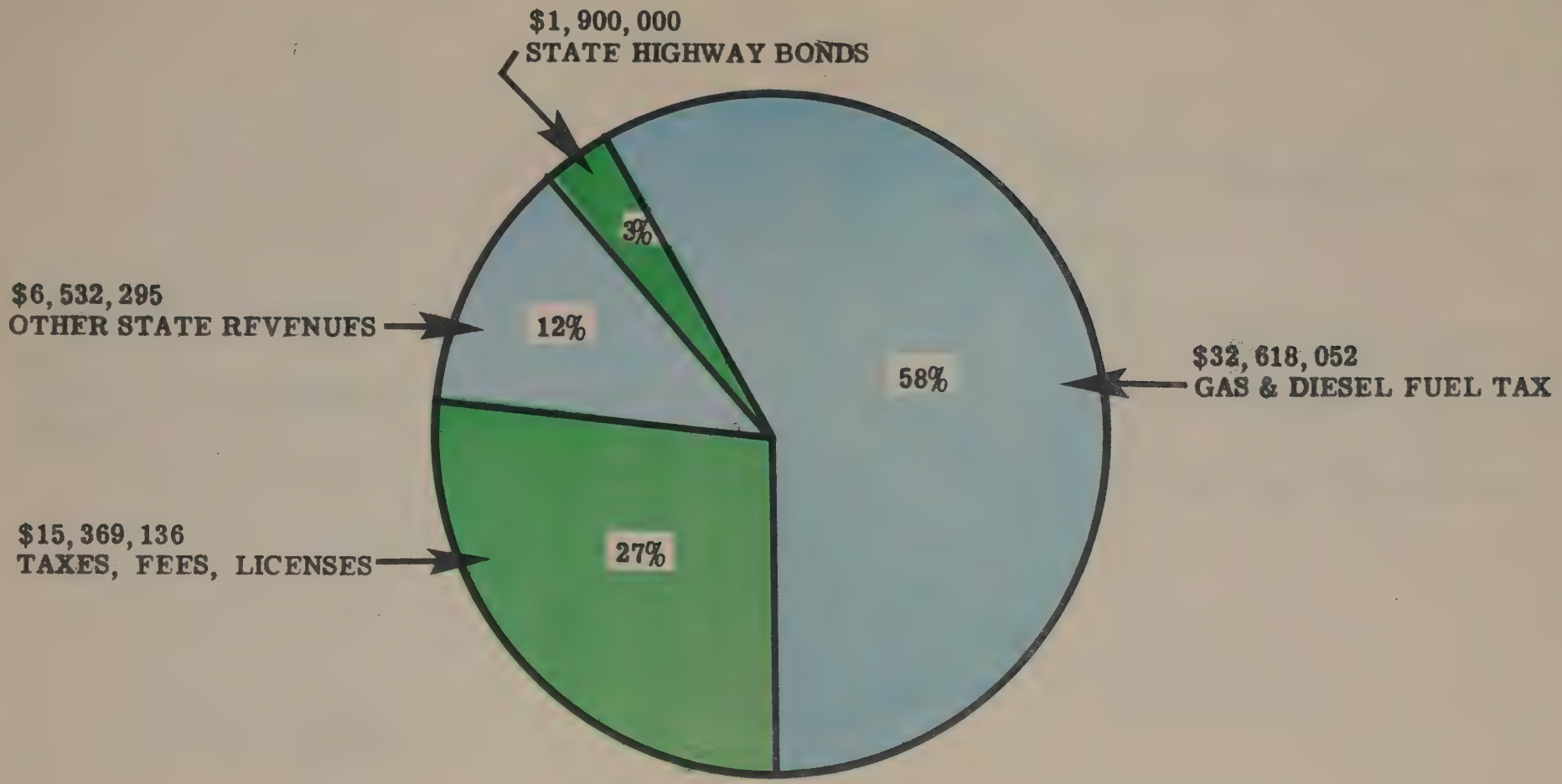
TOTAL = $120,845,386



(1) FISCAL YEARS

CHART 3 - PERCENTAGE DISTRIBUTION OF TOTAL CUMULATIVE STATE REVENUES
(SEE CHART 1) OF STATE OF NEVADA DEPARTMENT OF HIGHWAYS - 1917 TO 1950 (1)

TOTAL = $56,419,483



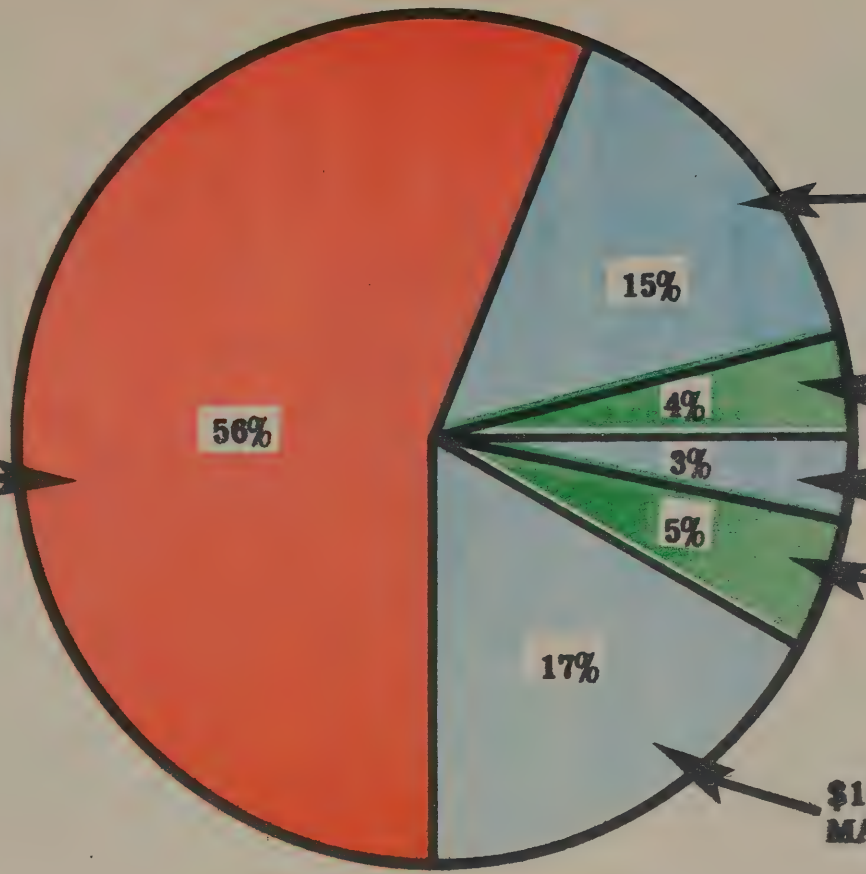
(1) FISCAL YEARS

CHART 4 - PERCENTAGE DISTRIBUTION BY TYPE OPERATION OF TOTAL CUMULATIVE

EXPENDITURES
(EXCLUDING TAX COLLECTION COSTS, ETC.)

(SEE CHART 2) OF STATE OF NEVADA DEPARTMENT OF HIGHWAYS - 1917 to 1950 (1)

TOTAL = $115,443,020



$64,811,187
CONSTRUCTION FEDERAL FUNDS

$18,007,962
CONSTRUCTION STATE FUNDS

$5,232,497
PRELIMINARY ENGINEERING

$3,341,347
GENERAL ADMINISTRATION

$4,789,326
OTHER EXPENDITURES

$19,260,701
MAINTENANCE

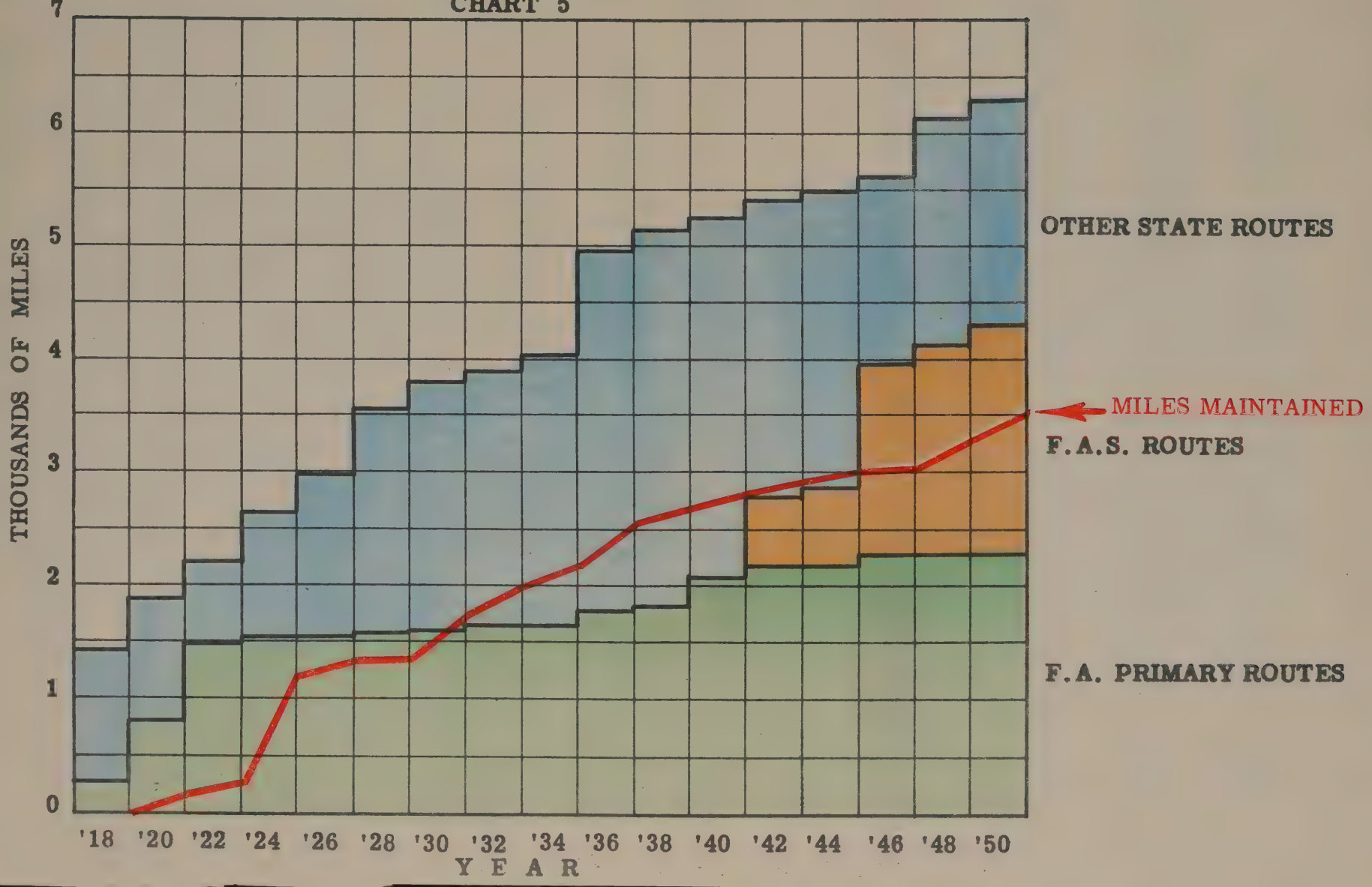
(1) FISCAL YEARS

MAINTENANCE OBLIGATIONS AND A

BIENNIUM COMPARISON OF GROWTH OF STATE-INTEREST ROADS

1917 to 1950

CHART 5



NEVADA HIGHWAY PLANNING DIVISION
STATE OF NEVADA - DEPARTMENT OF HIGHWAYS
U. S. DEPARTMENT OF COMMERCE - BUREAU OF PUBLIC ROADS

Total Revenues of Nevada State Department of Highways
by Fiscal Years 1917 - 1950
TABLE I

Year	Gas and Diesel Fuel Tax	Motor Vehicle Registration Fees	Public Service Commission License Fees	Drivers License	State Tax Levy	State Highway Bonds	Racing Commission Fees	Various Association Refunds	City Construction Refunds	County Construction Refunds	County Maintenance Refunds	Railway Construction Refunds	Accounts Receivable	Miscellaneous	Total State Revenue	Federal Aid	Total
1917	$ --	$ --	$ --	$ --	$ 120,570.54	$ --	$ --	$ --	$ --	$ --	$ --	$ --	$ --	$ 40,000.00	$ 160,570.54	$ --	$ 160,570.54
1918	--	63,851.10			60,479.79	--	17,024.99	--	--	--	--	--	--	195.16	141,551.04	--	141,551.04
1919	--	30,738.25	--	--	206,570.68	--	7,451.92	--	--	88,982.23	--	--	7,739.50	6,258.67	347,732.31	125,570.65	473,302.96
1920	--	329.75	--	--	113,000.86	475,000.00	20,055.18	16,380.00	--	225,211.32	--	--	45,496.18	--	895,473.29	385,906.73	1,281,380.02
1921	--	--	--	--	203,961.89	325,000.00	11,998.61	10,000.00	--	439,976.51	--	--	80,192.07	39.81	1,071,168.89	566,590.63	1,637,759.52
1922	--	--	--	--	121,980.72	--	20,866.97	12,152.99	25,205.79	354,533.08	--	--	37,019.61	2,609.19	574,368.35	754,815.47	1,329,183.82
1923	--	--	--	--	117,625.34	--	23,624.57	18,021.14	15,678.64	415,395.30	--	--	68,751.67	6,730.16	665,826.62	1,287,060.51	1,952,887.13
1924	60,000.00	96,877.15	--	--	119,466.65	--	--	14,872.47	42,335.31	548,504.67	--	41,505.52	78,092.07	1,156.07	1,002,809.91	2,146,590.15	3,149,400.06
1925	156,149.03	239,995.85	--	--	120,154.54	100,000.00	9,669.00	7,200.00	39,798.62	420,680.97	15,742.65	17,710.48	28,951.88	26.00	1,156,079.02	1,735,853.73	2,891,932.75
1926	230,389.73	71,357.72	--	--	40,541.67	--	--	16,631.47	13,472.71	390,591.84	23,644.27	38,982.55	28,299.26	90.97	854,002.19	930,747.40	1,784,749.59
1927	233,501.30	97,797.58	--	--	42,290.80	100,000.00	11,145.91	25,000.00	180.15	343,629.21	62,885.56	36,153.53	33,773.10	10,040.81	996,397.95	995,545.02	1,991,942.97
1928	259,731.32	109,749.02	--	--	1,131.85	100,000.00	7,515.03	--	8,822.50	243,287.44	30,172.26	18,874.57	33,991.50	4,988.24	818,263.73	1,040,934.23	1,859,197.96
1929	534,906.80	107,097.18	--	--	103,720.18	50,000.00	8,303.35	--	5,630.88	405,402.54	25,078.83	1,269.45	15,422.93	1,384.34	1,278,216.48	1,098,609.18	2,376,825.66
1930	674,711.02	147,493.81	48,292.25	--	106,201.86	--	--	--	5,000.00	121,872.91	5,806.40	--	27,268.16	916.60	1,137,563.01	1,120,686.76	2,258,249.77
1931	375,063.05	92,994.22	36,173.50	--	100,444.51	150,000.00	--	--	1,118.13	27,085.53	4,796.77	--	12,369.41	495.00	800,540.12	731,363.74	1,531,903.86
1932	764,349.77	217,239.86	65,450.00	--	95,963.81	200,000.00	9,773.33	--	2,000.00	3,000.00	3,250.00	10,975.85	22,094.40	--	1,394,097.02	2,763,866.69	4,157,963.71
1933	674,978.56	96,921.61	71,035.40	--	91,299.32	300,000.00	--	--	8,011.29	9,401.51	2,277.99	--	23,683.76	--	1,277,609.44	2,581,635.94	3,859,245.38
1934	804,597.15	110,668.49	148,101.72	--	46,347.96	--	--	--	2,657.41	--	--	--	17,097.69	--	1,129,470.42	3,592,012.04	4,721,482.46
1935	926,600.29	169,116.26	163,358.53	--	48,379.75	--	--	--	1,141.89	22,752.10	--	--	59,736.27	2,717.26	1,393,802.35	3,749,304.38	5,143,106.73
1936	1,085,290.55	165,888.94	221,223.92	--	8,836.69	--	--	--	3,000.00	12,000.00	--	--	18,144.68	5,202.43	1,519,587.21	4,090,024.26	5,609,611.47
1937	1,190,383.40	200,887.56	200,734.30	--	499.66	--	--	--	35,402.63	21,267.10	--	--	16,488.36	18,685.98	1,684,349.59	3,337,643.98	5,021,993.57
1938	1,282,599.60	158,500.25	201,699.83	--	--	100,000.00	--	--	3,097.46	2,366.09	--	1,187.08	38,245.50	14,680.77	1,802,376.58	3,080,768.08	4,883,144.66
1939	1,320,501.96	166,349.35	218,745.42	--	--	--	--	--	--	1,100.00	--	2,312.61	23,475.66	1,000.00	1,733,485.00	2,855,737.84	4,589,222.84
1940	1,509,892.75	189,169.18	258,811.45	--	--	--	--	--	--	10,082.95	--	116.66	33,913.41	14,781.41	2,016,767.81	1,961,063.94	3,977,831.75
1941	1,670,551.63	227,953.06	306,011.90	--	--	--	--	--	--	10,162.45	--	--	25,763.04	11,059.87	2,251,501.95	2,115,580.43	4,367,082.38
1942	1,904,568.78	339,542.73	404,449.16	67,614.00	--	--	--	--	--	--	--	--	24,217.03	1,030.96	2,741,422.66	1,951,591.21	4,693,013.87
1943	1,742,251.52	318,351.28	388,520.25	18,255.75	--	--	--	--	--	--	--	--	32,948.03	1,000.00	2,501,326.83	2,471,513.12	4,972,839.95
1944	1,402,385.58	337,817.90	451,407.43	61,393.51	--	--	--	--	--	800.00	--	--	43,583.66	650.00	2,298,038.08	1,793,789.88	4,091,827.96
1945	1,301,771.95	309,583.98	400,386.91	47,886.79	--	--	--	--	--	--	--	--	32,928.12	167.53	2,092,725.28	782,606.81	2,875,332.09
1946	1,910,308.27	342,270.76	471,957.73	32,871.43	--	--	--	--	--	--	--	--	39,139.50	27.86	2,796,575.55	767,110.32	3,563,685.87
1947	2,401,528.61	413,148.51	540,648.69	59,670.25	--	--	--	--	5,833.83	--	--	--	43,429.56	101.34	3,464,360.99	3,204,712.30	6,669,073.29
1948	2,609,593.15	422,736.42	635,471.44	44,154.35	--	--	--	--	--	--	--	--	67,672.48	142.66	3,779,770.50	2,761,376.93	6,541,147.43
1949	2,718,654.97	441,938.65	683,235.62	72,009.92	--	--	--	--	254,331.80	2,500.00	--	--	190,141.47	11.59	4,362,824.02	3,664,359.88	8,027,183.90
1950	2,852,791.21	480,103.37	823,595.40	42,602.08	--	--	--	--	5,300.72	362.12	--	--	74,072.37	1.20	4,278,828.47	4,366,214.87	8,645,043.34
Total	$32,618,051.95	$6,166,469.79	$6,739,310.85	$446,458.08	$1,869,468.87	$1,900,000.00	$147,428.86	$120,258.07	$478,019.76	$4,120,947.87	$173,654.73	$169,088.30	$1,324,133.99	$146,192.08	$56,419,483.20	$64,811,187.10	$121,230,670.30

NEVADA HIGHWAY PLANNING DIVISION
STATE OF NEVADA - DEPARTMENT OF HIGHWAYS
U. S. DEPARTMENT OF COMMERCE - BUREAU OF PUBLIC ROADS

Total Expenditures of Nevada State Department of Highways
by Fiscal Years 1917 to 1950

TABLE II

	EXPENDITURE STATE FUNDS																
Year	General Administration	Preliminary Engineering	Reno Plant Equipment Materials	State Construction Costs	Maintenance	Maintenance Buildings	County Maintenance	Roadside Improvement and Landscaping	State Building	Publicity and Information	Safety Division	Traffic and Sign Division	Drivers License (Net)	Special Highway Traffic Count	Total	Federal Aid	GRAND TOTAL
1917	$ --	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ --
1918	34,979.41	36,074.62	24,662.09	—	16,596.54	—	—	—	—	—	—	—	—	—	112,312.66	—	112,312.66
1919	38,323.07	48,328.95	85,241.93	265,323.87	29,330.21	—	—	—	—	—	—	—	—	—	466,548.03	125,570.65	592,118.68
1920	60,153.72	60,000.76	171,122.35	774,477.34	44,121.16	—	—	—	—	—	—	—	—	--	1,109,875.33	385,906.73	1,495,782.06
1921	69,158.54	70,988.53	1,355.28	488,550.56	47,799.40	—	—	—	—	—	—	—	—	--	677,852.31	566,590.63	1,244,442.94
1922	69,158.55	70,988.53	1,355.29	488,550.56	47,799.41	—	—	—	—	—	—	—	—	—	677,852.34	754,815.47	1,432,667.81
1923	85,428.85	92,232.34	40,645.15	591,382.34	116,756.73	—	—	—	—	—	—	—	—	—	926,445.41	1,287,060.51	2,213,505.92
1924	85,428.85	92,232.35	40,645.15	591,382.35	116,756.74	—	—	—	—	—	—	—	—	—	926,445.44	2,146,590.15	3,073,035.59
1925	84,902.89	56,404.34	25,218.63	363,969.83	261,807.07	—	18,610.23	—	—	—	—	—	—	—	810,912.99	1,735,853.73	2,546,766.72
1926	84,902.90	56,404.34	25,218.63	363,969.84	261,807.07	—	18,610.23	—	—	—	—	—	—	—	810,913.01	930,747.40	1,741,660.41
1927	59,440.14	57,541.36	(10,065.98)	353,452.17	351,330.68	—	22,508.27	—	—	—	—	—	—	—	834,206.64	995,545.02	1,829,751.66
1928	59,440.14	57,541.37	(10,065.98)	353,452.17	351,330.68	—	22,508.27	—	—	—	—	—	—	—	834,206.65	1,040,934.23	1,875,140.88
1929	62,323.51	60,039.92	60,450.51	466,733.32	418,065.08	—	17,970.45	—	—	—	—	—	—	—	1,085,582.79	1,098,609.18	2,184,191.97
1930	58,465.49	87,490.48	86,548.23	615,032.39	500,031.86	—	3,867.29	—	—	—	—	—	—	—	1,351,435.74	1,120,686.76	2,472,122.50
1931	32,730.08	83,759.01	28,886.65	299,277.20	301,166.64	—	6,672.86	—	—	—	—	—	—	—	752,492.44	731,363.74	1,483,856.18
1932	50,543.00	166,332.59	16,904.58	510,614.02	614,278.72	—	4,098.69	—	—	—	—	—	—	—	1,362,771.60	2,763,866.69	4,126,638.29
1933	47,377.55	119,796.10	(36,133.88)	377,015.08	566,845.41	—	—	—	—	—	—	—	—	—	1,074,900.26	2,581,635.94	3,656,536.20
1934	48,997.36	140,176.38	35,244.51	574,906.16	502,715.66	—	—	—	—	—	—	—	—	—	1,302,040.07	3,592,012.04	4,894,052.11
1935	60,427.78	200,505.03	(12,537.37)	206,735.45	617,784.47	—	—	—	—	—	—	—	—	--	1,072,915.36	3,749,304.38	4,822,219.74
1936	90,393.28	220,140.19	36,241.67	282,927.72	675,726.06	—	—	—	—	—	—	—	—	--	1,305,428.92	4,090,024.26	5,395,453.18
1937	109,803.12	247,986.84	246,942.54	513,777.34	846,033.35	—	—	—	21,642.18	4,076.14	—	—	—	5,777.99	1,996,039.50	3,337,643.98	5,333,683.48
1938	142,502.47	207,372.40	30,193.15	215,118.91	756,305.26	—	—	—	—	6,570.28	—	—	—	422.31	1,358,484.78	3,080,768.08	4,439,252.86
1939	107,719.39	210,318.11	10,606.53	308,980.06	830,877.69	—	—	5,513.68	—	13,749.10	13,756.44	3,776.76	--	6,306.86	1,511,604.62	2,855,737.84	4,367,342.46
1940	124,711.30	230,311.01	85,618.64	373,526.48	763,075.33	—	—	5,746.95	—	15,909.31	12,745.94	11,398.25	—	7,226.54	1,630,269.75	1,961,063.94	3,591,333.69
1941	131,467.79	234,576.06	288,423.60	651,045.97	774,573.50	34,563.98	—	5,259.89	—	11,659.30	8,600.84	23,881.16	8,507.89	7,444.55	2,180,004.53	2,115,580.43	4,295,584.96
1942	139,814.75	284,696.12	294,341.32	420,374.35	848,789.57	45,839.64	—	2,817.80	—	8,144.50	—	101,511.29	—	8,024.24	2,154,353.58	1,951,591.21	4,105,944.79
1943	132,417.94	99,602.88	(117,209.93)	198,911.55	745,480.25	23,717.87	—	2.75	—	3,872.94	—	60,572.95	14,767.67	10,028.96	1,172,165.83	2,471,513.12	3,643,678.95
1944	137,213.81	86,396.91	(1,104.79)	312,817.94	703,340.85	13,853.57	—	284.42	—	2,948.71	—	49,796.82	—	9,736.48	1,315,284.72	1,793,789.88	3,109,074.60
1945	135,853.31	77,989.62	130,384.29	169,221.14	773,778.26	7,098.83	—	49.54	—	2,645.75	—	52,388.71	—	10,154.42	1,359,563.87	782,606.81	2,142,170.68
1946	161,136.12	155,458.84	256,993.77	684,509.81	855,194.89	49,859.67	—	171.89	—	6,986.62	—	55,969.67	6,507.25	10,671.52	2,260,460.05	767,110.32	3,027,570.37
1947	206,594.12	273,327.10	750,334.07	1,679,781.89	1,051,422.22	29,106.56	—	4.13	—	14,163.23	3,404.75	72,422.82	781.29	12,584.63	4,093,926.81	3,204,712.30	7,298,639.11
1948	218,012.29	351,039.58	302,514.20	1,837,296.09	1,195,746.18	43,344.30	—	—	—	28,399.09	13,797.05	65,055.77	22,618.66	15,255.98	4,093,079.19	2,761,376.93	6,854,456.12
1949	198,545.20	480,644.26	361,827.12	1,393,520.06	1,405,657.62	50,940.58	—	—	50,000.00	34,089.26	16,802.26	47,623.38	--	16,087.04	4,055,736.78	3,664,359.88	7,720,096.66
1950	212,980.28	515,800.03	246,466.25	1,281,327.44	1,469,479.06	83,572.45	—	—	75,000.00	48,810.50	10,763.25	—	1,263.95	10,257.63	3,955,720.84	4,366,214.87	8,321,935.71
TOTAL	$3,341,347.00	$5,232,496.95	$3,497,268.20	$18,007,961.40	$18,861,803.62	$398,897.45	$114,846.29	$19,851.05	$146,642.18	$202,024.73	$79,870.53	$344,397.58	$54,446.71	$129,979.15	$50,631,832.84	$64,811,187.10	$115,443,019.94

NEVADA HIGHWAY PLANNING DIVISION
STATE OF NEVADA - DEPARTMENT OF HIGHWAYS
U.S. DEPARTMENT OF COMMERCE - BUREAU OF PUBLIC ROADS

Expenditures -Tax Collection Costs, Refunds, Transfers, Etc.
of Nevada State Department of Highways by Fiscal Years
1917 to 1950

TABLE III

	TAX COLLECTION COSTS, REFUNDS, TRANSFERS, ETC.													
Year	Use Fuel Tax Administration	Gas Tax Administration	Gas Tax Refunds	Drivers License Administration	Public Service Commission Deputies	Common Carrier Refunds	County Highway Bond Redemption	Revolving and Emergency Funds	Accounts Receivable	Police Patrol Highway	Total	Federal Aid	State Expenditures	TOTAL
1917	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
1918	—	—	—	—	—	—	—	2,500.00	—	—	2,500.00	—	112,312.66	114,812.66
1919	—	—	—	—	—	—	11,629.46*	7,500.00	16,115.58	—	35,245.04	125,570.65	466,548.03	627,363.72
1920	—	—	—	—	—	—	—	10,000.00	48,204.69	—	58,204.69	385,906.73	1,109,875.33	1,553,986.75
1921	—	—	—	—	—	—	—	4,238.85	63,473.56	—	67,712.41	566,590.63	677,852.31	1,312,155.35
1922	—	—	—	—	—	—	—	4,238.86	63,473.56	—	67,712.42	754,815.47	677,852.34	1,500,380.23
1923	—	—	—	—	—	—	—	—	59,148.34	—	59,148.34	1,287,060.51	926,445.41	2,272,654.26
1924	—	—	—	—	—	—	—	—	59,148.34	—	59,148.34	2,146,590.15	926,445.44	3,132,183.93
1925	—	—	—	—	—	—	—	—	24,923.56	12,094.31	37,017.87	1,735,853.73	810,912.99	2,583,784.59
1926	—	—	—	—	—	—	—	—	24,923.56	12,094.31	37,017.87	930,747.40	810,913.01	1,778,678.28
1927	—	—	—	—	—	—	—	—	33,589.57	10,173.80	43,763.37	995,545.02	834,206.64	1,873,515.03
1928	—	—	—	—	—	—	—	—	33,589.57	10,173.80	43,763.37	1,040,934.23	834,206.65	1,918,904.25
1929	—	—	—	—	—	—	—	—	23,053.30	7,741.24	30,794.54	1,098,609.18	1,085,582.79	2,214,986.51
1930	—	—	—	—	—	—	29,721.65	—	29,512.19	8,504.29	67,738.13	1,120,686.76	1,351,435.74	2,539,860.63
1931	—	—	—	—	—	—	27,912.50	—	7,212.21	11,584.36	46,709.07	731,363.74	752,492.44	1,530,565.25
1932	—	—	—	—	—	—	39,551.25	—	22,793.98	15,873.38	78,218.61	2,763,866.69	1,362,771.60	4,204,856.90
1933	—	—	—	—	—	—	31,600.00	—	23,183.97	16,283.75	71,067.72	2,581,635.94	1,074,900.26	3,727,603.92
1934	—	—	—	—	—	—	28,178.75	—	16,128.34	28,178.75	72,485.84	3,592,012.04	1,302,040.07	4,966,537.95
1935	—	443.47	27,960.92	—	6,362.03	—	23,857.50	—	59,056.56	24,135.18	141,815.66	3,749,304.38	1,072,915.36	4,964,035.40
1936	—	3,064.69	84,323.70	—	10,798.01	—	5,378.50	—	16,637.51	25,372.05	145,574.46	4,090,024.26	1,305,428.92	5,541,027.64
1937	—	4,454.50	81,910.33	—	11,256.55	13,756.12	21,902.75	—	20,283.23	28,573.51	182,136.99	3,337,643.98	1,996,039.50	5,515,820.47
1938	—	3,750.83	72,208.36	—	11,449.27	790.56	8,793.75	—	37,804.42	36,344.76	171,141.95	3,080,768.08	1,358,484.78	4,610,394.81
1939	—	2,657.89	85,462.93	—	11,959.51	1,351.35	8,305.02	—	28,483.05	20,647.50	158,867.25	2,855,737.84	1,511,604.62	4,526,209.71
1940	3,391.77	2,695.62	93,421.13	—	11,672.99	2,810.58	6,966.34	—	25,814.30	41,151.06	187,923.79	1,961,063.94	1,630,269.75	3,779,257.48
1941	4,035.68	4,694.88	122,367.19	—	14,758.70	9,117.76	—	—	25,716.86	32,697.55	213,388.62	2,115,580.43	2,180,004.53	4,508,973.58
1942	3,413.13	7,671.35	154,901.43	62,074.55	52,354.81	413.54	—	—	25,086.79	—	305,915.60	1,951,591.21	2,154,353.58	4,411,860.39
1943	7,619.75	7,186.74	267,276.02	18,255.75	48,537.23	814.15	—	—	42,606.01	—	392,295.65	2,471,513.12	1,172,165.83	4,035,974.60
1944	5,425.58	8,149.44	169,213.73	47,768.81	47,646.99	37.70	—	—	33,544.66	—	311,786.91	1,793,789.88	1,315,284.72	3,420,861.51
1945	4,479.14	7,985.66	150,777.17	37,124.35	45,487.53	4,609.50	—	—	33,706.16	—	284,169.51	782,606.81	1,359,563.87	2,426,340.19
1946	5,420.79	7,983.35	164,953.82	32,871.43	50,999.45	552.56	—	—	30,979.54	—	293,760.94	767,110.32	2,260,460.05	3,321,331.31
1947	6,060.15	9,780.71	169,719.25	59,670.25	59,286.59	864.85	—	—	42,561.17	—	347,942.97	3,204,712.30	4,093,926.81	7,646,582.08
1948	6,424.84	11,767.70	188,841.68	44,154.35	64,334.56	928.30	—	—	79,818.68	—	396,270.11	2,761,376.93	4,093,079.19	7,250,726.23
1949	6,932.48	13,913.02	201,843.55	67,204.89	76,218.87	312.66	—	—	221,955.54	—	588,381.01	3,664,359.88	4,055,736.78	8,308,477.67
1950	6,125.03	10,899.11	149,078.21	42,602.08	40,926.18	849.43	—	—	39,406.55	112,860.02	402,746.61	4,366,214.87	3,955,720.84	8,724,682.32
TOTAL	$59,328.34	$107,098.96	$2,184,259.42	$411,726.46	$564,049.27	$37,209.06	$243,797.47	$28,477.71	$1,311,935.35	$454,483.62	$5,402,365.66	$64,811,187.10	$50,631,832.84	$120,845,385.60

* County Tax Refund.

NEVADA HIGHWAY PLANNING DIVISION
STATE OF NEVADA - DEPARTMENT OF HIGHWAYS
U. S. DEPARTMENT OF COMMERCE - BUREAU OF PUBLIC ROADS

Estimate of Revenues of State of Nevada,
Department of Highways for 1951 Fiscal Year and
for 1952-1953 Biennium Compared to Actual Revenues
of 1950 Fiscal Year

TABLE IV

Item	1950	1951	1952	1953
Motor Vehicle Fuel Tax (Net)	$2,703,713	$2,925,000	$3,100,000	$3,100,000
Auto License Fees (Net)	480,103	500,000	550,000	550,000
Common Carrier Licenses	822,746	900,000	1,100,000	1,100,000
Drivers License Fees	42,602	75,000	40,000	75,000
Federal Aid	4,366,215	4,885,000	4,900,000	4,900,000
County and others	5,663	35,000	---	---
TOTAL - - - - - - -	$8,421,042*	$9,320,000	$9,690,000	$9,725,000

* Receipts of $8,645,043.34 are shown in report of the Department of Highways, State of Nevada for the fiscal years ending June 30, 1949-1950 (see p. 42). The difference of $224,001.21 consists of $149,078.21 of Gas Tax Refunds; $74,073.57 of Accounts Receivable and $849.43 of Common Carrier and Truck Refunds.

NEVADA HIGHWAY PLANNING DIVISION
STATE OF NEVADA - DEPARTMENT OF HIGHWAYS
U. S. DEPARTMENT OF COMMERCE - BUREAU OF PUBLIC ROADS

Estimate of Expenditures of State of Nevada, Department of Highways for 1951 Fiscal Year and for 1952-1953 Biennium Compared to Actual Expenditures of 1950 Fiscal year

TABLE V

Item	1950	1951	1952	1953
General Administration	$ 205,096	$ 225,000	$ 250,000	$ 275,000
Preliminary Engineering	515,800	550,000	600,000	600,000
Construction Costs (Federal Aid)	4,429,597	4,800,000	5,000,000	5,000,000
Construction Costs (State)	1,107,399	1,200,000	1,250,000	1,250,000
Reno Plant and Equipment	246,466	250,000	275,000	300,000
General Maintenance	1,469,479	1,550,000	1,600,000	1,650,000
Maintenance Buildings	83,573	225,000	250,000	200,000
State Office Building	75,000	150,000	---	---
Public Relations	9,285	10,000	10,000	15,000
Official Road Maps	7,885	10,000	10,000	10,000
Research and Investigation	110,546	125,000	135,000	150,000
Safety Division	10,763	---	---	---
Traffic Studies	10,258	10,000	10,000	10,000
Highway Patrol	112,860	219,985	212,500	212,500
Highways and Parks Magazine	39,525	40,000	40,000	40,000
Use Fuel Tax Administration	6,125	7,000	8,000	10,000
Gas Tax Administration	10,899	12,000	12,000	15,000
Drivers License Administration	43,866	---	---	---
Motor Vehicle Department	37,526	---	---	---
Public Service Commission Salary	3,400	3,400	3,400	3,400
Total - - - - - - - - - -	$8,535,348*	$9,387,385	$9,665,900	$9,740,900

* Expenditures of $8,724,682.32 are shown in report of the Department of Highways, State of Nevada for the fiscal years ending June 30, 1949-1950 (see p.43). The difference of $189,334.19 consists of $149,078.21 of Gas Tax Refunds; $39,406.55 Accounts Receivable and $849.43 of Common Carrier and Truck Refunds.

NEVADA HIGHWAY PLANNING DIVISION
STATE OF NEVADA - DEPARTMENT OF HIGHWAYS
U. S. DEPARTMENT OF COMMERCE - BUREAU OF PUBLIC ROADS

Amount and Percentage
Comparison of Total Construction Costs
of Nevada State Department of Highways
from 1937 - 1950 by Fiscal Years

TABLE VI

Year	Arithmetic Averages (1)	(1) Total Construction Costs	(2) Percent States Share to Total Construction Costs	(3) States Share of Construction Costs	Arithmetic Averages (3)
1937)		$ 3,851,421	13.3	$ 513,777	
1938)		3,295,887	6.5	215,119	
1939)	$ 3,082,640	3,164,717	9.8	308,980	$ 412,489
1940)		2,334,590	16.0	373,526	
1941)		2,766,626	23.5	651,046	
1942)		2,371,966	17.7	420,375	
1943)		2,670,425	7.4	198,912	
1944)	$ 1,910,489	2,106,608	14.8	312,818	$ 357,167
1945)		951,828	17.7	169,221	
1946)		1,451,620	47.2	684,510	
1947)		4,884,494	34.4	1,679,782	
1948)	$ 5,047,147	4,598,673	40.0	1,837,296	
1949)		5,057,880	25.9	1,393,520	$1,547,981
1950)		5,647,542	22.7	1,281,327	
Total - - -		$45,154,278	22.2	$10,040,209	
14-Year Average		$ 3,225,306	22.2	$ 717,157	

NEVADA

AVERAGE UNIT PRICE FOR CONTRACT WORK
TABLE VII

TYPE	ALL CONTRACT WORK		
	1940 Prices	1949 Prices	Percent Increase
Asphalt (Sc 3 & Mc 3) (tons)	$13.800	$32.803	138%
Roadway Excavation (cu. yds.)	0.208	0.471	126%
Structure Excavation (cu. yds.)	1.030	2.238	117%
Class "A" Concrete (cu. yds.)	21.689	56.382	160%
Reinforcing Steel (lb.)	0.045	0.126	180%
Backfill (cu. yds.)	0.536	1.570	193%
15" C. M. Pipe (lin. ft.)	1.659	2.891	74%
18" C. M. Pipe (lin. ft.)	1.908	3.287	72%
24" C. M. Pipe (lin. ft.)	2.380	4.422	86%
36" C. M. Pipe (lin. ft.)	5.103	8.976	76%
Culvert Markers (each)	2.391	5.828	144%
Guide Posts (each)	2.399	6.792	183%
Construction of Fence (lin. ft.)	0.095	0.261	175%

TABLE VIII

State Highway Fund Balances by Months

1949

		State Controller's Balance	Highway Balance	Theoretical Net Worth
January	5	$1,020,871.44	$ 717,591.76	$1,918,087.44
February	5	1,270,445.24	1,027,708.27	1,945,085.07
March	5	1,320,991.74	999,178.05	1,983,778.03
April	5	1,239,642.56	893,380.12	1,746,085.09
May	5	1,326,328.59	851,213.10	1,862,645.22
June	5	957,365.51	373,054.32	1,350,423.40
July	5	1,035,846.51	372,471.60	1,438,950.23
August	5	771,440.22	34,020.35	1,037,091.22
September	5	874,333.15	42,671.76	1,168,545.07
October	5	462,411.24	252,785.67	1,157,439.54
November	5	479,572.19	91,380.89	1,111,778.99
December	5	405,684.71	53,854.78	1,050,414.64

1950

January	5	$ 290,287.50	53,220.72	$1,031,956.98
February	5	569,086.90	206,543.98	1,135,864.76
March	5	573,592.06	342,634.53	1,150,667.01
April	5	816,379.99	566,850.49	1,216,380.39
May	5	728,588.44	265,010.05	1,114,195.34
June	5	589,828.28	94,850.70	949,002.46
July	5	925,178.36	292,832.62	1,068,492.80
August	5	871,457.39	140,827.10	933,071.94
September	5	890,283.94	27,247.14	890,191.01
October	5	667,697.51	161,239.80	774,405.28
November	5	512,355.27	28,434.83	830,591.39
December	5	295,737.72	121,300.79	635,857.09

1951

January	5	$ 288,052.03	$ 124,062.44	$ 630,390.21

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